Science, Service, Stewardship

Atlantic Sturgeon –Listing under the Endangered Species Act

March 15, 2012

NOAA FISHERIES SERVICE

NOAA FISHERIES SERVICE

Timeline: Listing Atlantic Sturgeon

- March 2007 – NMFS, FWS, USGS completed status review
- October 6, 2009 – Natural Resources Defense Council petitioned NOAA Fisheries to list Atlantic sturgeon under the ESA and designate critical habitat
- January 6, 2010 – NOAA Fisheries published positive 90-day finding in *Federal Register* indicating petitioned action may be warranted; petition establishes statutory timeline for publication of proposed listing determination by October 6, 2010
- October 6, 2010 - Proposed rules published (75 FR 61872 and 75 FR 61904)
- February 6, 2012 - Final rules published (77 FR 5880 and 77 FR 5914)
- April 6, 2012 – Effective date of the listings

NOAA FISHERIES SERVICE

Listing is for 5 Distinct Population Segments (DPSs)

Gulf of Maine DPS

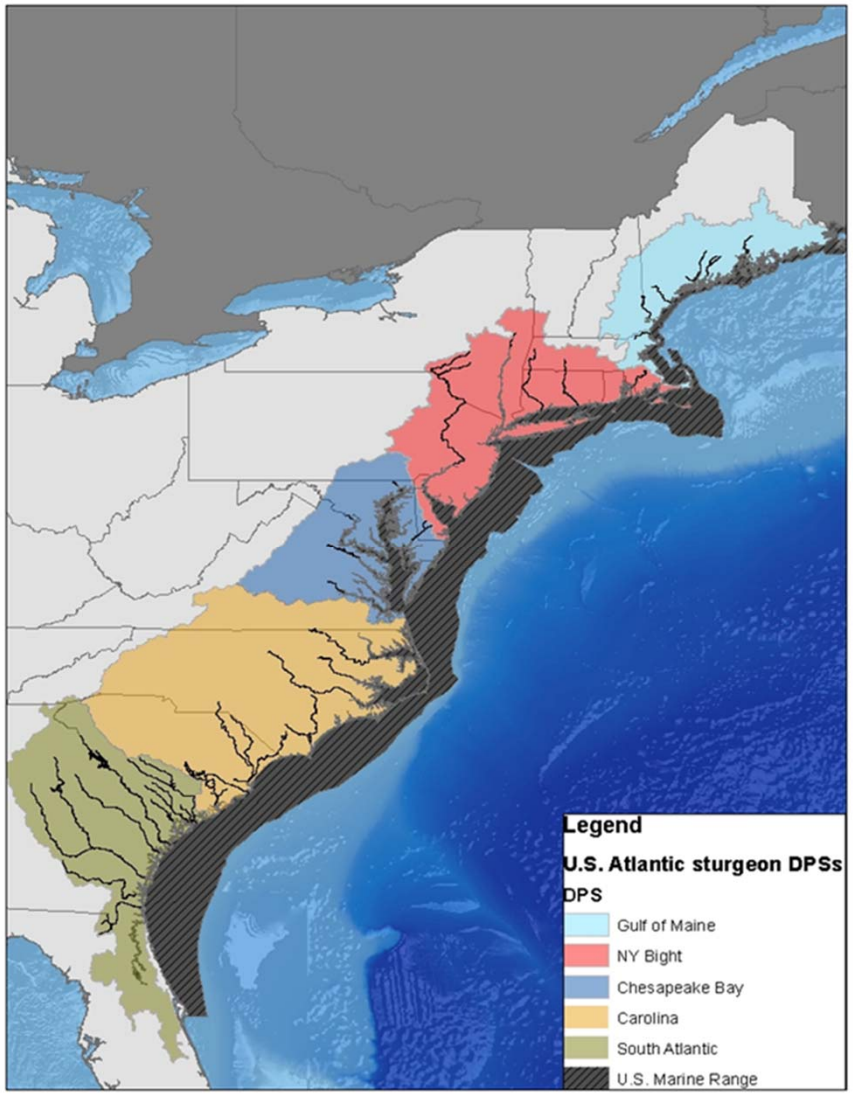
New York Bight DPS

Chesapeake Bay DPS

Carolina DPS

South Atlantic DPS

Marine range for all DPSs extends from Canada to FL



NOAA FISHERIES SERVICE

Five Factors under the ESA

- Factor A - poor water quality, dredging, dams/barriers prevent access to important spawning habitat, and water availability (in the South) due to allocation for municipal, industrial, and agricultural uses, as well as drought and climate change
- Factor B - bycatch in commercial and recreational fisheries is a significant threat – sink gill net fisheries (e.g., monkfish, dogfish) are significant sources of mortality
- Factor C – disease and predation are not affecting the long term persistence of the species
- Factor D - primary threats identified above are not adequately addressed through existing regulatory mechanisms
- Factor E - Current impacts from vessel strikes represent a substantial risk to the long-term persistence of the Chesapeake Bay and New York Bight Distinct Population Segments

NOAA FISHERIES SERVICE

Conservation Efforts

- 1998 Amendment to the Atlantic States Marine Fisheries Commission Fishery Management Plan
- Penobscot River Restoration Project
- Multi-state conservation program (Maine, New Hampshire, Massachusetts)
- Hudson River Estuary Management Plan
- James River Restoration Plan
- St. Mary's Fish Restoration Committee Project
- Ongoing research efforts in many river systems provide much needed information.

Conclusion*: *While these efforts provide some benefit to Atlantic sturgeon, they do not obviate the need to list them under the ESA

NOAA FISHERIES SERVICE

Gulf of Maine Distinct Population Segment

- Significant risk from bycatch; moderate risk from water quality and dredging
- Spawning known to occur in only 1 spawning river, possibly in one other
- Positive signs include observations of Atlantic sturgeon in rivers from which sturgeon observations have not been reported for many years and potentially higher catch-per-unit-effort levels than in the past
- These signs coupled with the fact that some of the threats to the Distinct Population Segment are moderate led to the conclusion that the species is likely to become endangered in the foreseeable future, but is not now endangered

Conclusion: Gulf of Maine DPS Threatened

NOAA FISHERIES SERVICE

New York Bight & Chesapeake Bay Distinct Population Segments

- Spawning populations are thought to be one to two orders of magnitude below historical levels
- Significant risks posed by bycatch, water quality, vessel strikes, dredging
- Spawning occurs in two rivers in the New York Bight Distinct Population Segment and at least one river in the Chesapeake Distinct Population Segment

Conclusion: NYB and CB DPSs endangered

NOAA FISHERIES SERVICE

Carolina and South Atlantic Distinct Population Segments

- Estimated to be between 1% and 6% of historical population abundance
- Significant risks posed by dams, dredging, reduced water quality and quantity, bycatch, and the inadequacy of regulatory mechanisms to control these threats.
- Spawning occurs in 11 rivers in the Southeast, but spawning populations have been extirpated in 5 to 9 rivers in the Southeast

Conclusion: Carolina and SA DPSs endangered

NOAA FISHERIES SERVICE

Comments and Concerns from the public

- Atlantic States Marine Fishery Commission opposed the listing citing management measures they have implemented
- Reasons cited for opposing the listing by some states and some members of the general public:
  - lack of data
  - the methods used to determine the Distinct Population Segments
  - disagreement with the threats assessment (e.g., water quality is improving, bycatch is not as high as reported in the proposed rules)
  - listing will not prevent impacts to the species but will delay necessary scientific research and cause economic hardship
  - Atlantic States Marine Fishery Commission coast-wide moratorium is working, and the Commission should remain the sole management authority for Atlantic sturgeon
  - no new information between1998 and now to suggest that listing Atlantic sturgeon is warranted

NOAA FISHERIES SERVICE

Additional actions following the listing

- Critical habitat: must be designated within1 year of the final listing rule (i.e., by February 6, 2013)

- "Five –year status reviews": required to ensure accuracy of listing classifications

- Recovery Planning:
  - Draft Recovery Plan should be completed 18 months after listing; final Plan completed 2.5 years after listing
  - Recovery Team will develop down-listing and de-listing criteria and actions needed to achieve recovery
  - ASMFC's sturgeon technical committee and States will have input into the Plan
  - Public input and engagement is sought in the recovery planning process

NOAA FISHERIES SERVICE

Questions?

NOAA FISHERIES SERVICE

Post listing

- Coordination with Fishery Management Councils, states, ASMFC
- Final 4(d) rule
- Scientific research permits
- Section 7 consultation

NOAA FISHERIES SERVICE

Coordination

- Coordinate with other federal agencies (Section 7)
  - Webinar/conference call - 3/26
- Coordinate with states and ASMFC to address takes in state fisheries and other activities (Sections 6 & 10)
  - Webinar/conference call – 3/22

NOAA FISHERIES SERVICE

Section 6

- Cooperative agreement between NMFS and state to work collaboratively to enhance the conservation of threatened, endangered, candidate, and proposed species.
- Up to the state to implement and maintain an active conservation program.
- States with cooperative agreements may compete for federal funding through the annual *Species Recovery Grants to States* opportunity.
- Delaware, Maine, Maryland, Massachusetts, New Jersey, New York, and Virginia currently have cooperative agreements with NMFS.
- Agreements reviewed on annual basis to ensure that states are maintaining active and effective conservation programs for listed species.

NOAA FISHERIES SERVICE

Section 10

- Individuals planning to conduct any activity resulting in the "take" of an endangered or threatened species must possess a permit.
- Two components to authorize different types of take:
  - —Section 10(a)(1)(A) - intentional take of listed species for scientific research or to enhance the propagation and survival of the species.
  - —Section 10(a)(1)(B) - non-federal entities (e.g., states, local governments, private citizens) to unintentionally take a listed species as long as the take is incidental to otherwise lawful activities.

NOAA FISHERIES SERVICE

Section 10(a)(1)(A) - Scientific research permits

- Advance permitting system to help Atlantic sturgeon researchers continue their work
- 12 permits expected to be issued by or close to effective date.
- Permits are issued by F/PR in Headquarters

NOAA FISHERIES SERVICE

Section 10(a)(1)(B)

- Section 10(a)(1)(B) permit - applicant must develop a conservation plan (CP) or habitat conservation plan (HCP).
- HCPs
  - planning documents that describe the effects of the proposed take, potential minimization and/or mitigation measures, and funding for the program.
  - include both listed and unlisted species
  - currently working on HCPs for hydropower operations
  - discussing HCP process with ASMFC primarily re: state fishery takes.
  - program not delegated to the regions but specific projects are

NOAA FISHERIES SERVICE

Final 4(d) rule

- Need to finalize a rule, under section 4(d) of the ESA, to specify prohibitions on take, as well as exemptions to take, for the threatened Gulf of Maine DPS.
- Proposed rule published June 10, 2011 (76 FR 34023)
  - Applied all Section 9 prohibitions with limited exceptions for scientific research, salvage and resuscitation
  - Sought public comment
- Expect to publish final rule in June

NOAA FISHERIES SERVICE

Coordination cont.

- Coordinate with Council staff, PDTs, Committees, APs, etc. on potential measures to include in BiOps to reduce bycatch in federal fisheries (Section 7)
  - MAFMC Sturgeon Committee meeting - 3/19
  - NEFMC Groundfish AP meeting - 3/29
  - NEFMC Meeting – April 24-26

NOAA FISHERIES SERVICE

Questions?

NOAA FISHERIES SERVICE

Section 7 Consultation

- Section 7 of the ESA directs NMFS to ensure that all Federal actions are not likely to jeopardize the continued existence of any listed species
- Federal action = any discretionary action that is authorized, funded or carried out by a Federal agency
- Jeopardy = an appreciable reduction in the likelihood of survival and recovery of the species in the wild
- For Atlantic sturgeon, each DPS is a unique species (range of all DPSs overlaps)
- Must make a jeopardy determination for each listed species (e.g., each DPS)

NOAA FISHERIES SERVICE

What are we doing now?

We have reviewed existing Biological Opinions to determine which ones consider actions that may affect Atlantic sturgeon

These include actions authorized, funded or carried out by: NMFS, Army Corps of Engineers, Environmental Protection Agency, Federal Energy Regulatory Commission, and the Nuclear Regulatory Commission

NOAA FISHERIES SERVICE

Reinitiation of Consultations

Informals

- most informal consultations are not likely to need to be reinitiated but there could be cases where this is necessary (e.g., NLAA for shortnose sturgeon but may be incidental take of Atlantic sturgeon)
- Since Atlantic sturgeon were proposed for listing, we have provided action agencies with “technical assistance” considering effects of proposed actions on Atlantic sturgeon

Formals

- We have identified over 60 existing Biological Opinions. Of these, over 50 consider actions that may interact with Atlantic sturgeon. We have identified approximately 20 “high priority” Opinions that we are working to get completed as soon as possible. This includes 11 Fishery Management Plans.

NOAA FISHERIES SERVICE

Biological Opinions

These Opinions have been or will be reinitiated soon:

- —11 FMPs: scallop, multispecies, dogfish, monkfish, skate, squid/mackerel/butterfish, summer flounder/scup/black sea bass, bluefish, lobster, red crab, ocean quahog, tilefish
- —NEFSC surveys (e.g., spring and fall bottom trawl)
- —NEAMAP
- —NEFSC Penobscot River surveys
- —Several Army Corps authorized dredging projects

NOAA FISHERIES SERVICE

Biological Opinions...

Additionally, we are likely to reinitiate consultation on:

- —Nuclear power plant operations authorized by the NRC
- —Water quality issues regulated by EPA
- —Penobscot River dam removal project
- —USCG activities
- —Other bridge and in-water construction activities

NOAA FISHERIES SERVICE

What does a formal consultation do?

- Biological Opinion establishes the “status of the species” considering what is known about each spawning population and DPS and the threats that are faced within and outside the action area – together, this information establishes the “baseline”
- The jeopardy analysis examines the “future” with and without the action under consideration to determine if the proposed action is likely to appreciably reduce the species likelihood of survival and recovery

NOAA FISHERIES SERVICE

Effects Analysis in the Opinion will…

In addition to whale and sea turtle analysis, we will…

- Determine the effect of the action under consideration, as it currently operates/is proposed, on each DPS of Atlantic sturgeon
- Establish a number of Atlantic sturgeon likely to be captured/injured/killed per DPS
- Determine if that annual loss is likely to appreciably reduce the likelihood of survival and recovery

NOAA FISHERIES SERVICE

If we conclude "No Jeopardy"...

- Provide an Incidental Take Statement that exempts a certain amount of take from the ESA Section 9 prohibitions on take
- Level of exempted take is the amount of take we anticipate to result from the proposed action operating as is
- ITS also includes Reasonable and Prudent Measures that are non-discretionary and are "reasonable and appropriate" to minimize and monitor take
- Terms and Conditions are required. These serve to implement the RPMs
- In most cases, the action taking place with RPMs in place should result in less take than was exempted
- The "minor change rule": RPMs can not alter the basic design, location, scope, duration, or timing of the action, and must involve only minor changes

NOAA FISHERIES SERVICE

If we conclude "Jeopardy"

- Must develop at least one Reasonable and Prudent Alternative
- RPA modifies the existing operations of the action to reduce the number of mortalities to avoid the likelihood of jeopardy
- Can have multiple RPAs that can be chosen from as long as they all meet the relevant conditions
- RPA can require one major change in operations or several smaller changes provided that together the small changes had enough of an impact to remove jeopardy.
- RPA is likely to have a "time frame" associated with it (e.g., "must modify operations to reduce bycatch by X% in X years)
- Any RPA must meet several conditions:
  - can be implemented in a manner consistent with the intended purpose of the action,
  - can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction,
  - is economically and technologically feasible; and,
  - removes jeopardy.

NOAA FISHERIES SERVICE

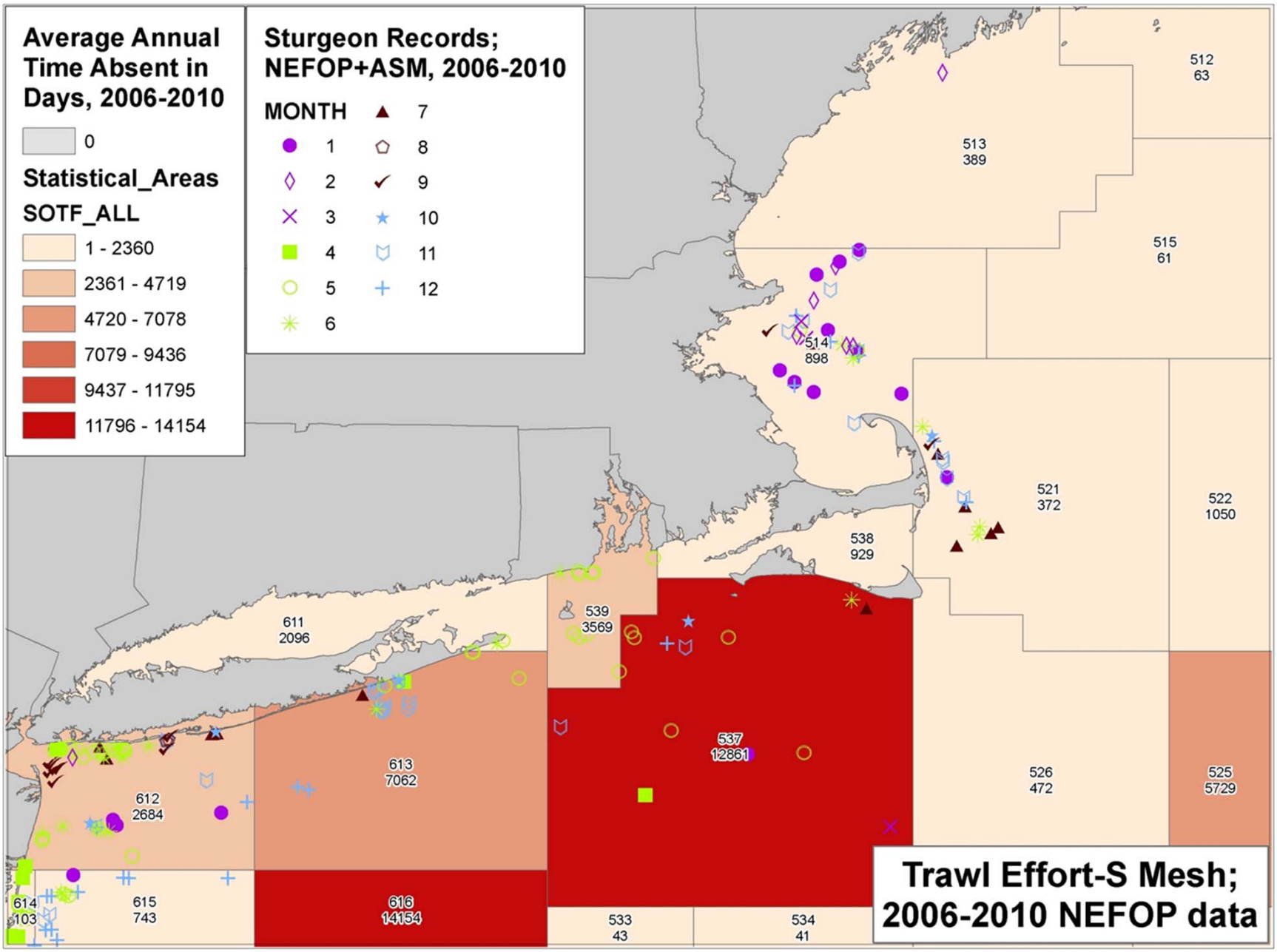
Once an RPA is developed...

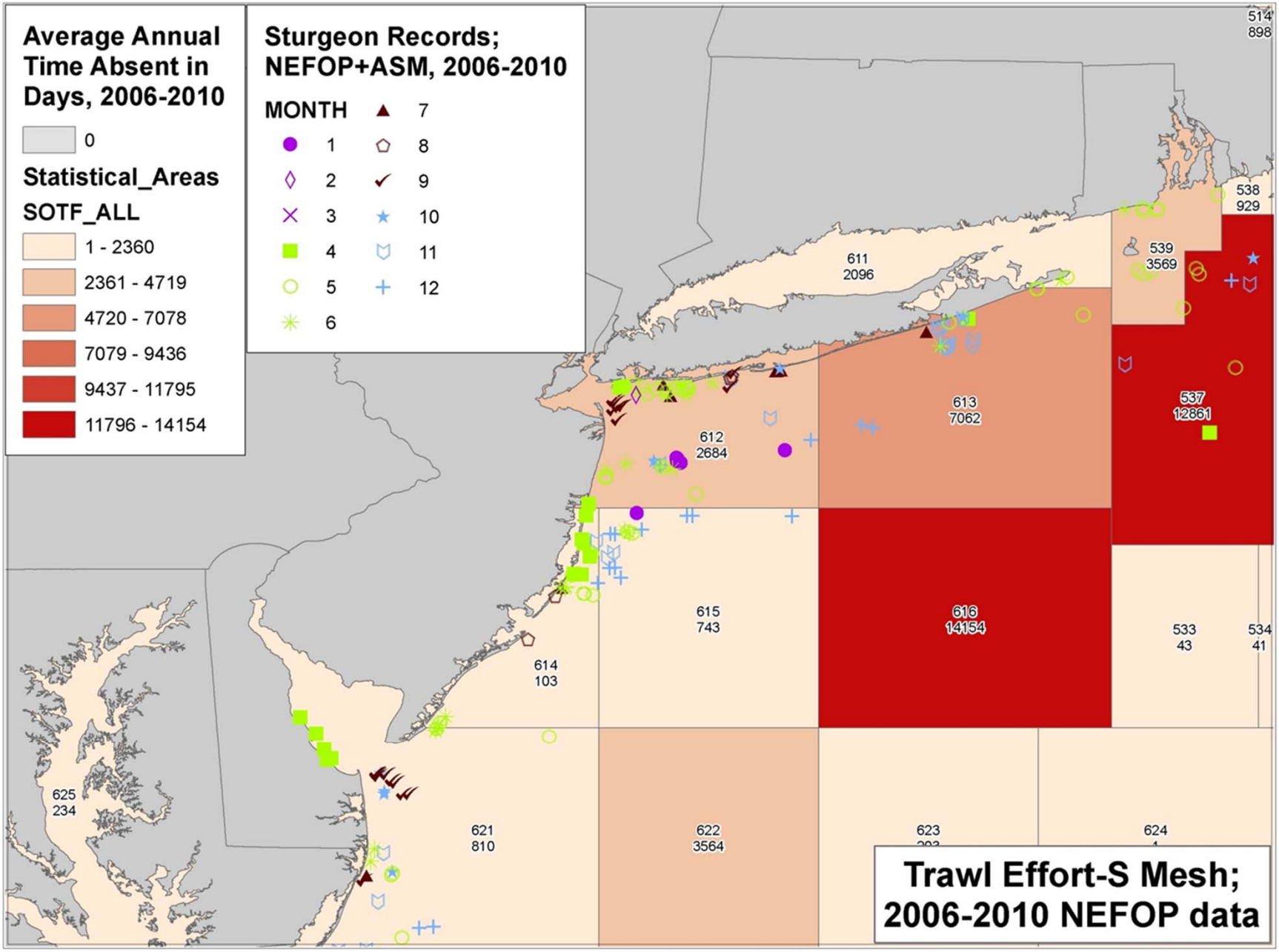
- Implementation of the RPA is mandatory
  - phased in approach to implementation possible provided we can justify that any delay in implementation is not likely to jeopardize the species
- Analysis demonstrating that the action carried out pursuant to that RPA will result in mortalities at a low enough rate so that the action is not likely to jeopardize any listed species (e.g., any DPS of Atlantic sturgeon)
- Incidental Take Statement provided for the modified action
- ITS provides a take exemption (e.g., number of Atlantic sturgeon likely to be captured/injured/killed in modified action) with non-discretionary RPMs and Terms and Conditions

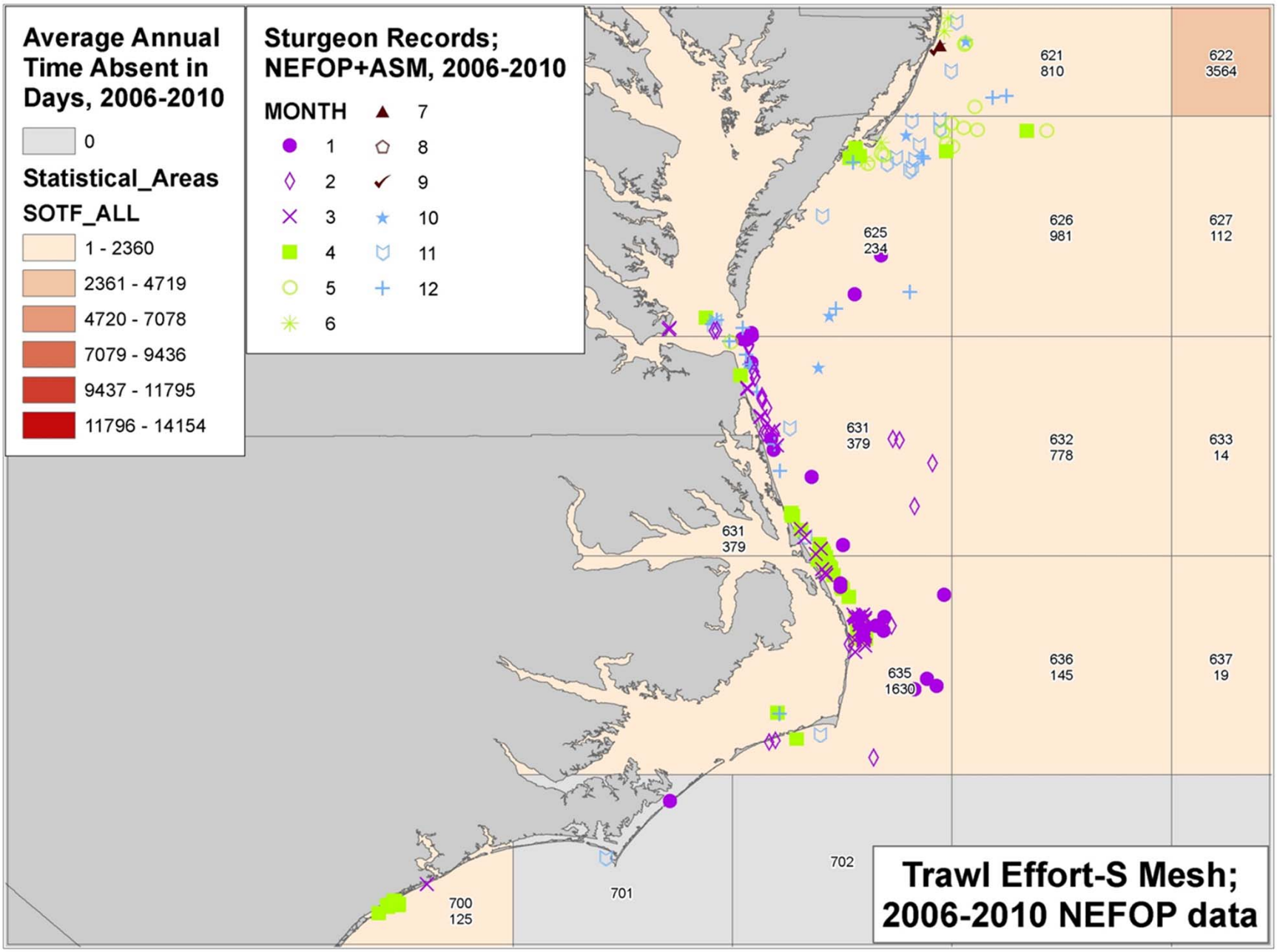
Effort by gear type and mesh size, with NEFOP and ASM sturgeon records

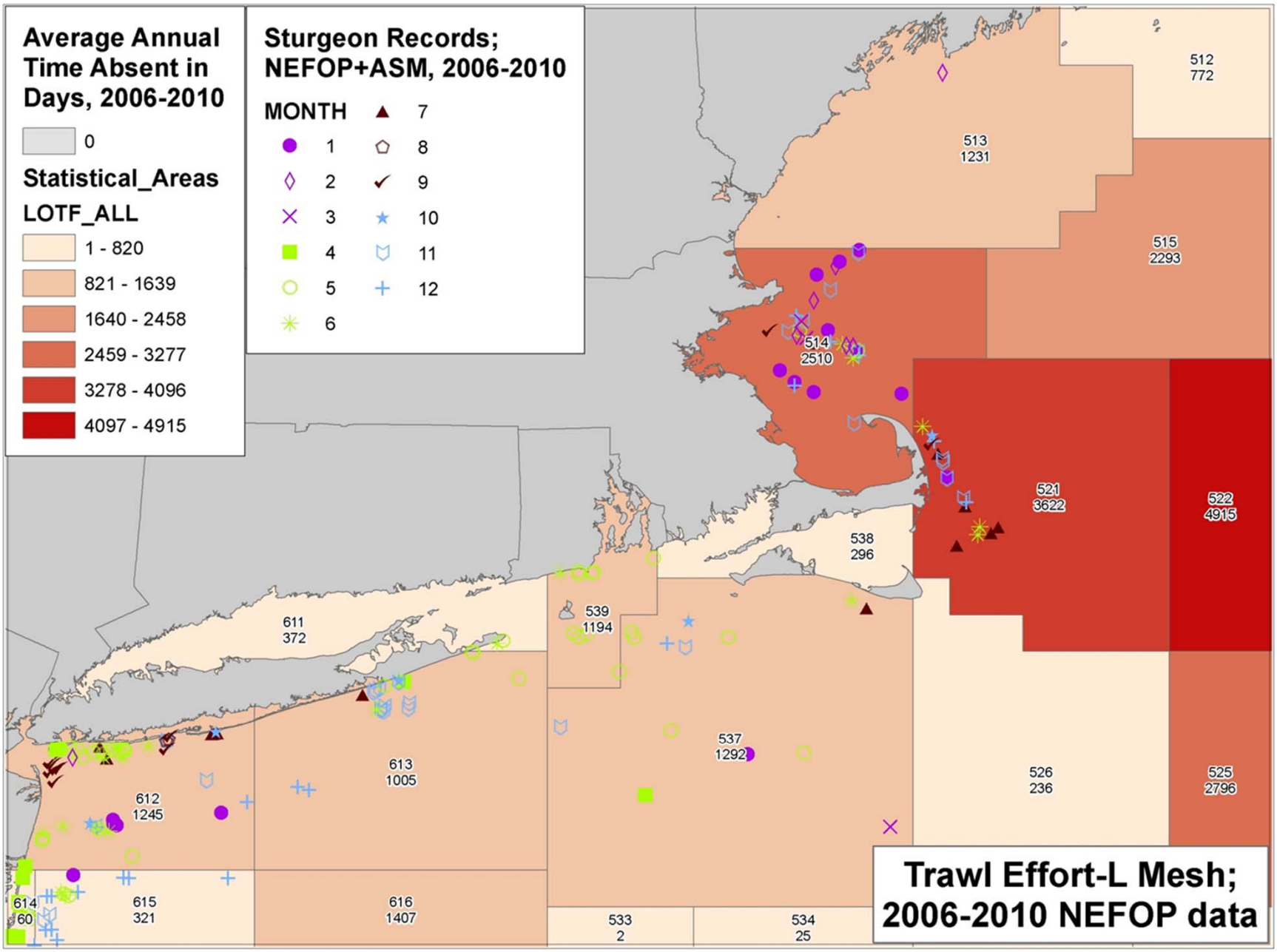
Sturgeon records; 2006-2010

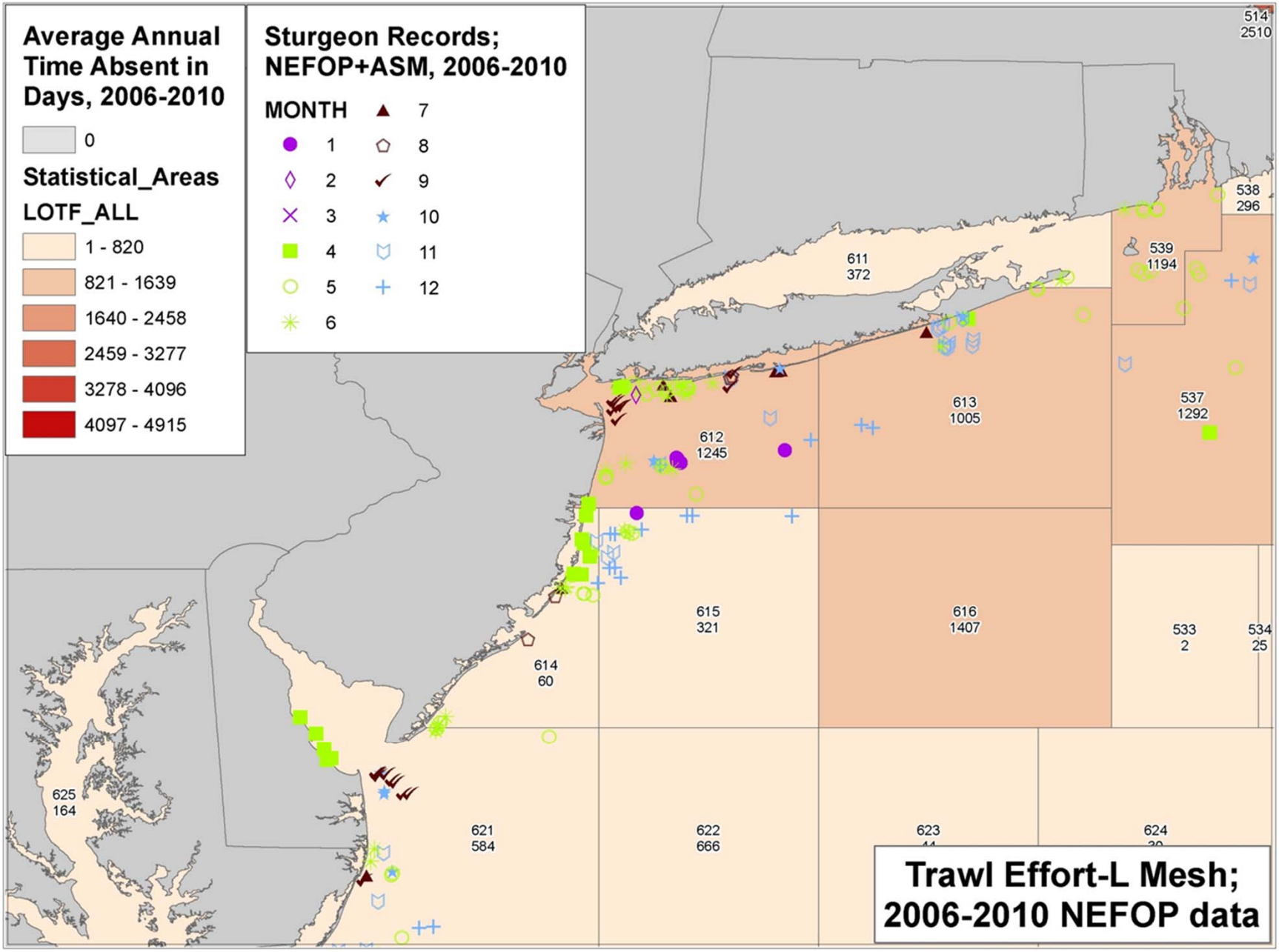
Effort; 2006-2010 average

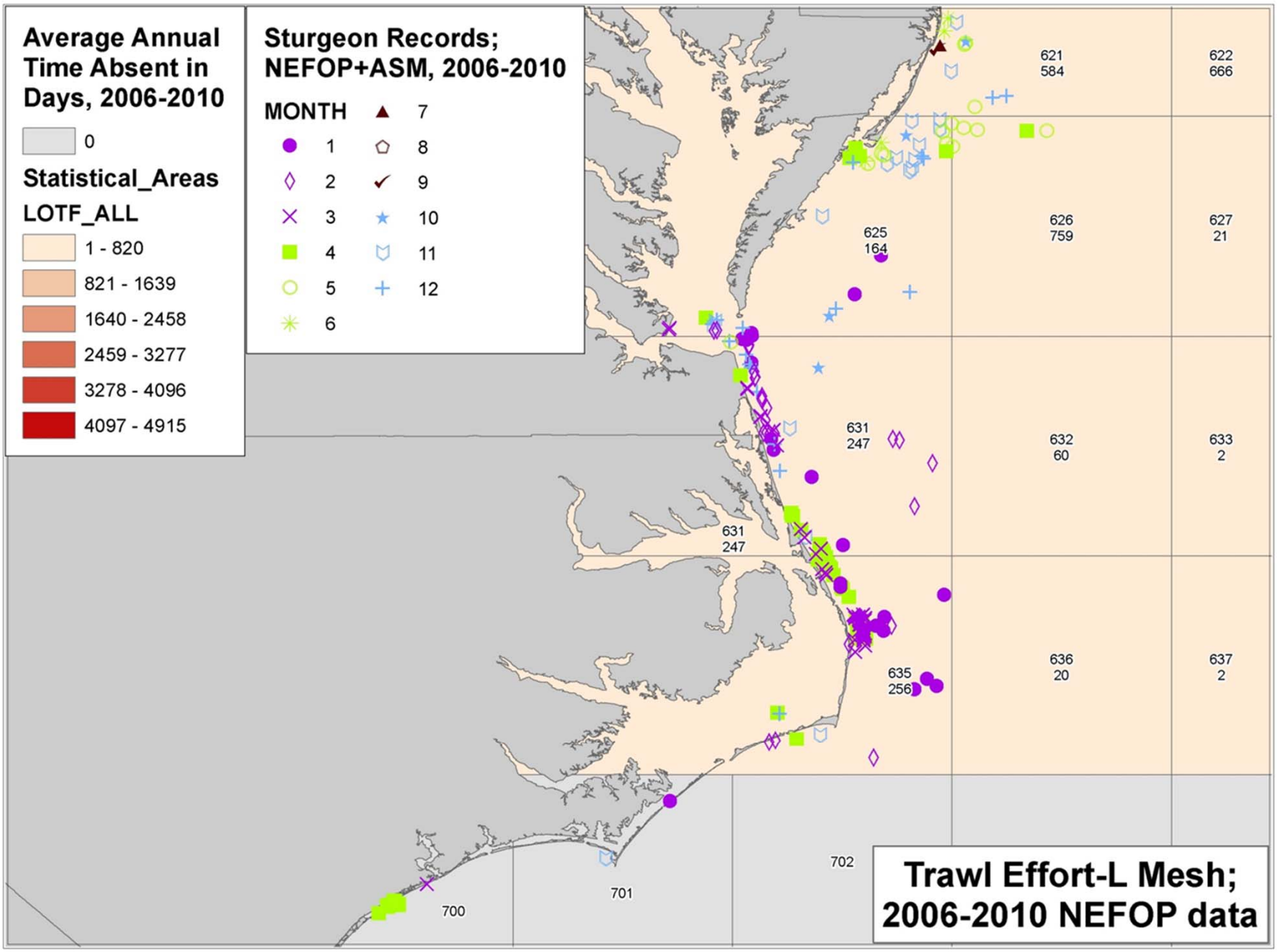

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
SOTF_ALL
1 - 2360
2361 - 4719
4720 - 7078
7079 - 9436
9437 - 11795
11796 - 14154
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
512 63
513 389
515 61
514 898
521 372
522 1050
538 929
539 3569
611 2096
537 12861
613 7062
612 2684
526 472
525 5729
614 103
615 743
616 14154
533 43
534 41
Trawl Effort-S Mesh; 2006-2010 NEFOP data

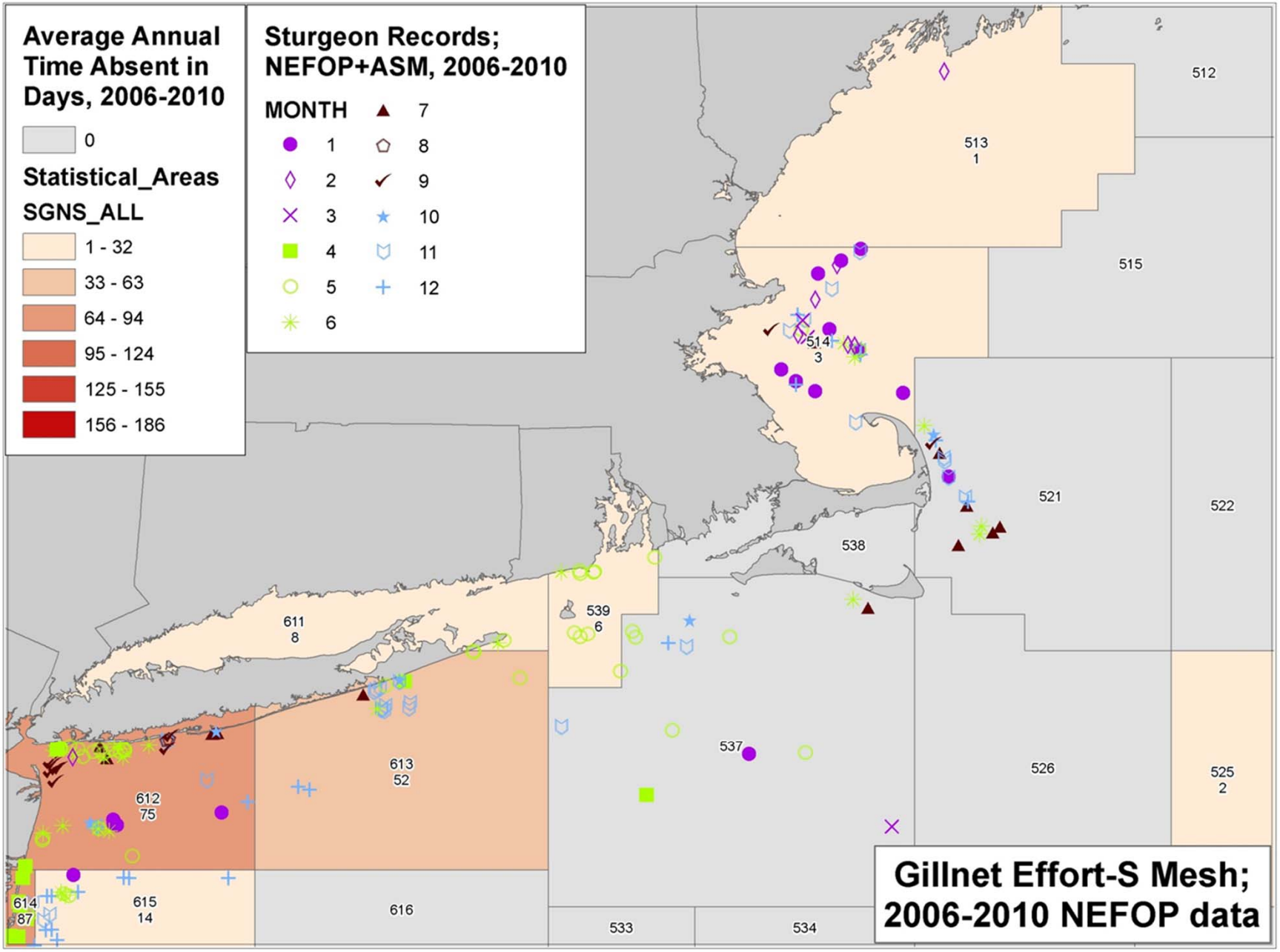

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
SOTF_ALL
1 - 2360
2361 - 4719
4720 - 7078
7079 - 9436
9437 - 11795
11796 - 14154
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
514
898
538
929
539
3569
611
2096
613
7062
537
12861
612
2684
615
743
616
14154
533
43
534
41
614
103
625
234
621
810
622
3564
623
624
Trawl Effort-S Mesh; 2006-2010 NEFOP data

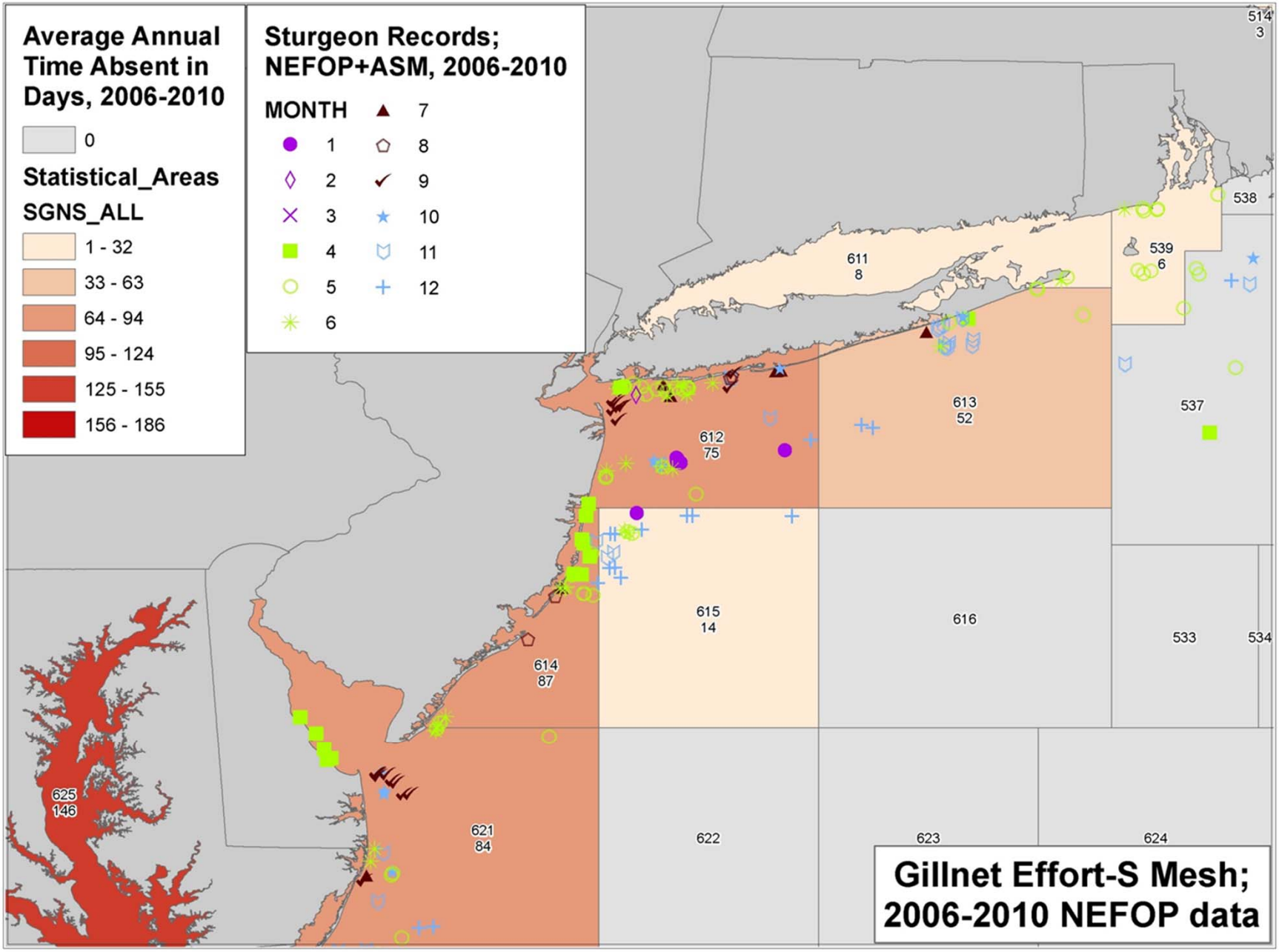

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
SOTF_ALL
1 - 2360
2361 - 4719
4720 - 7078
7079 - 9436
9437 - 11795
11796 - 14154
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
621
810
622
3564
625
234
626
981
627
112
631
379
632
778
633
14
631
379
635
1630
636
145
637
19
700
125
701
702
Trawl Effort-S Mesh; 2006-2010 NEFOP data

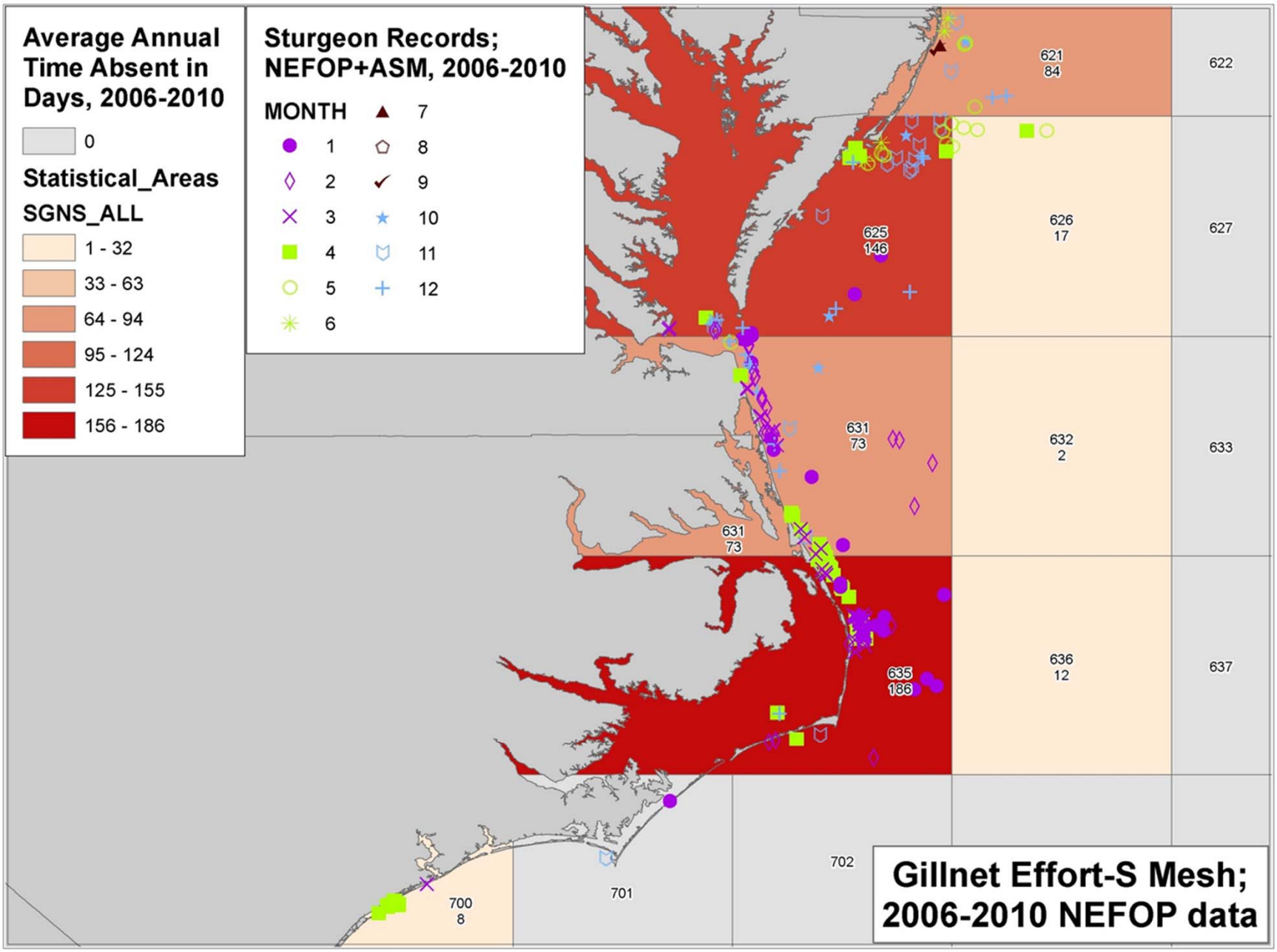

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
LOTF_ALL
1 - 820
821 - 1639
1640 - 2458
2459 - 3277
3278 - 4096
4097 - 4915
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
512
772
513
1231
515
2293
514
2510
521
3622
522
4915
538
296
539
1194
611
372
537
1292
613
1005
612
1245
526
236
525
2796
614
60
615
321
616
1407
533
2
534
25
Trawl Effort-L Mesh; 2006-2010 NEFOP data

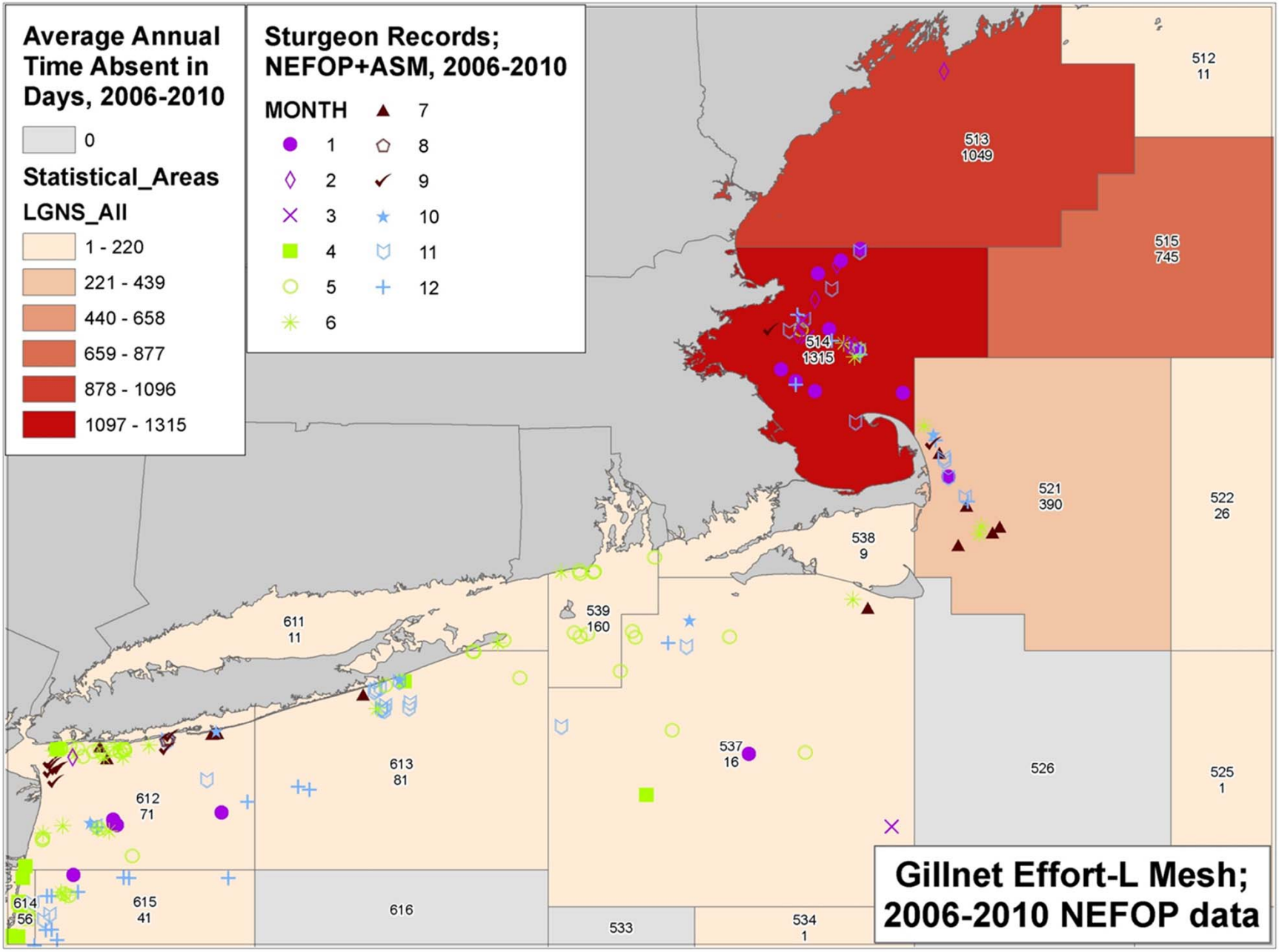

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
LOTF_ALL
1 - 820
821 - 1639
1640 - 2458
2459 - 3277
3278 - 4096
4097 - 4915
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
514
2510
538
296
539
1194
611
372
537
1292
613
1005
612
1245
615
321
616
1407
533
2
534
25
614
60
625
164
621
584
622
666
623
624
Trawl Effort-L Mesh; 2006-2010 NEFOP data

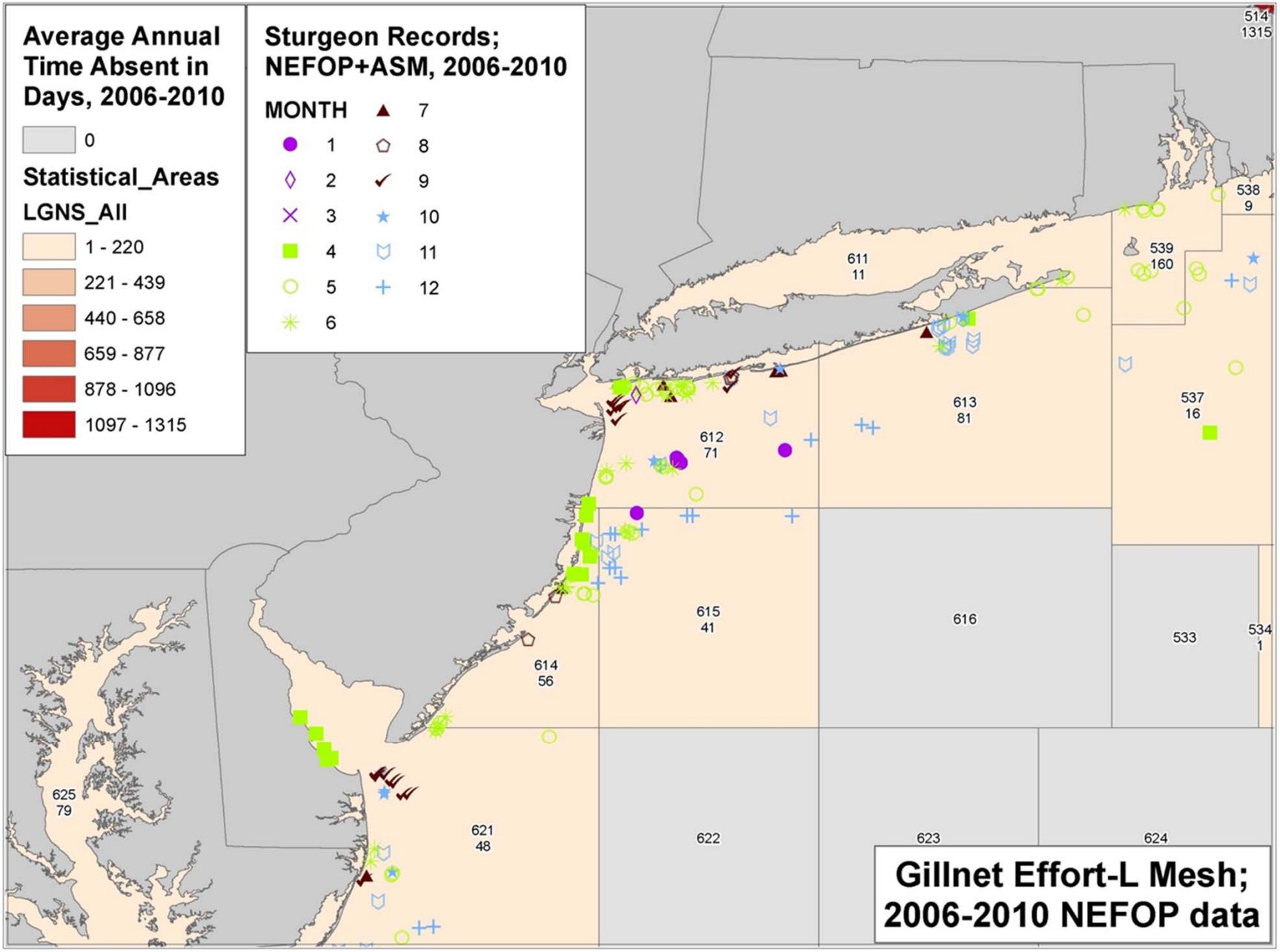

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
LOTF_ALL
1 - 820
821 - 1639
1640 - 2458
2459 - 3277
3278 - 4096
4097 - 4915
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
621
584
622
666
625
164
626
759
627
21
631
247
632
60
633
2
631
247
635
256
636
20
637
2
700
701
702
Trawl Effort-L Mesh; 2006-2010 NEFOP data

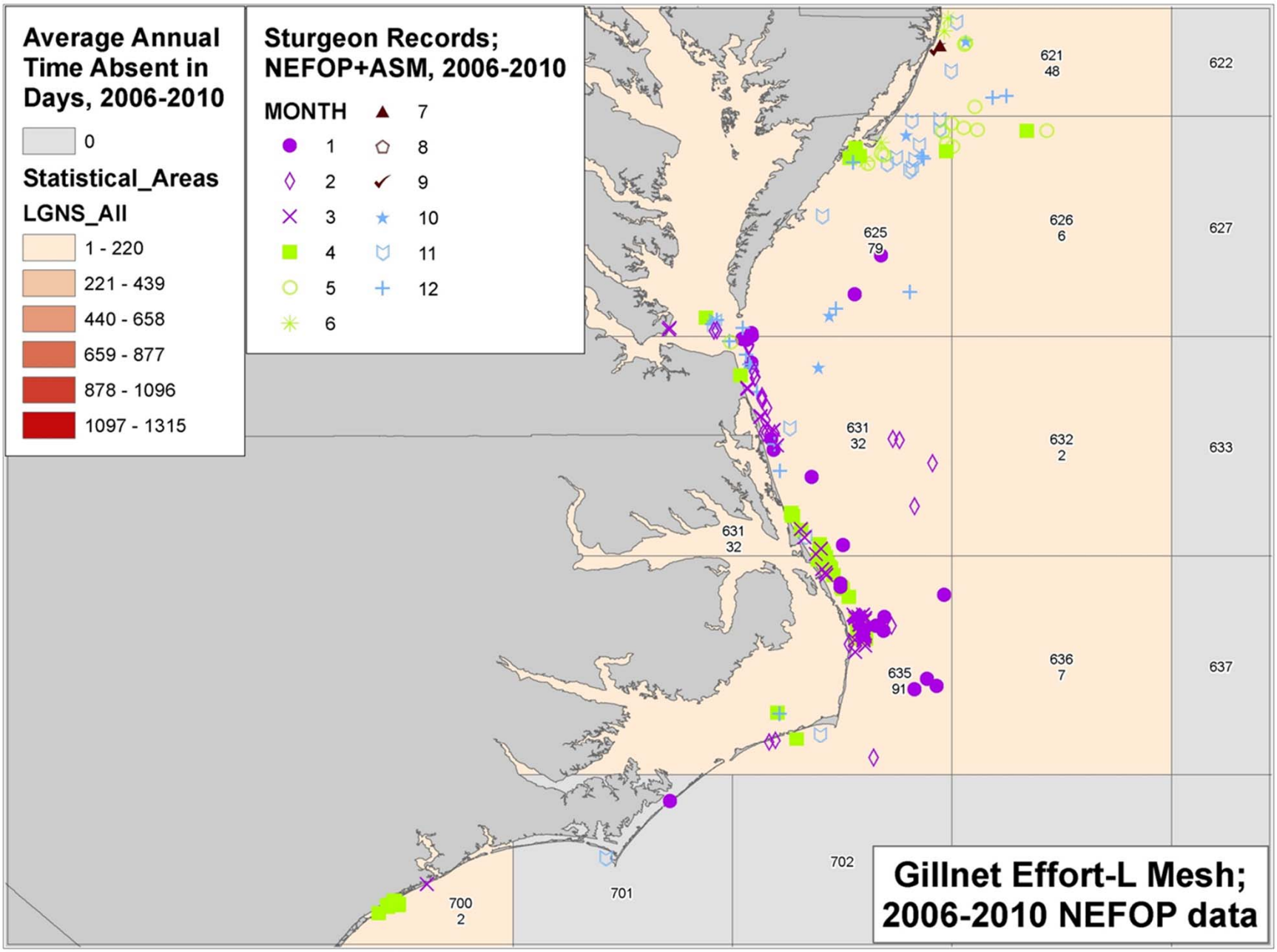

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
SGNS_ALL
1 - 32
33 - 63
64 - 94
95 - 124
125 - 155
156 - 186
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
512
513
1
515
514
3
521
522
538
539
6
611
8
613
52
612
75
614
87
615
14
616
537
526
525
2
533
534
Gillnet Effort-S Mesh; 2006-2010 NEFOP data

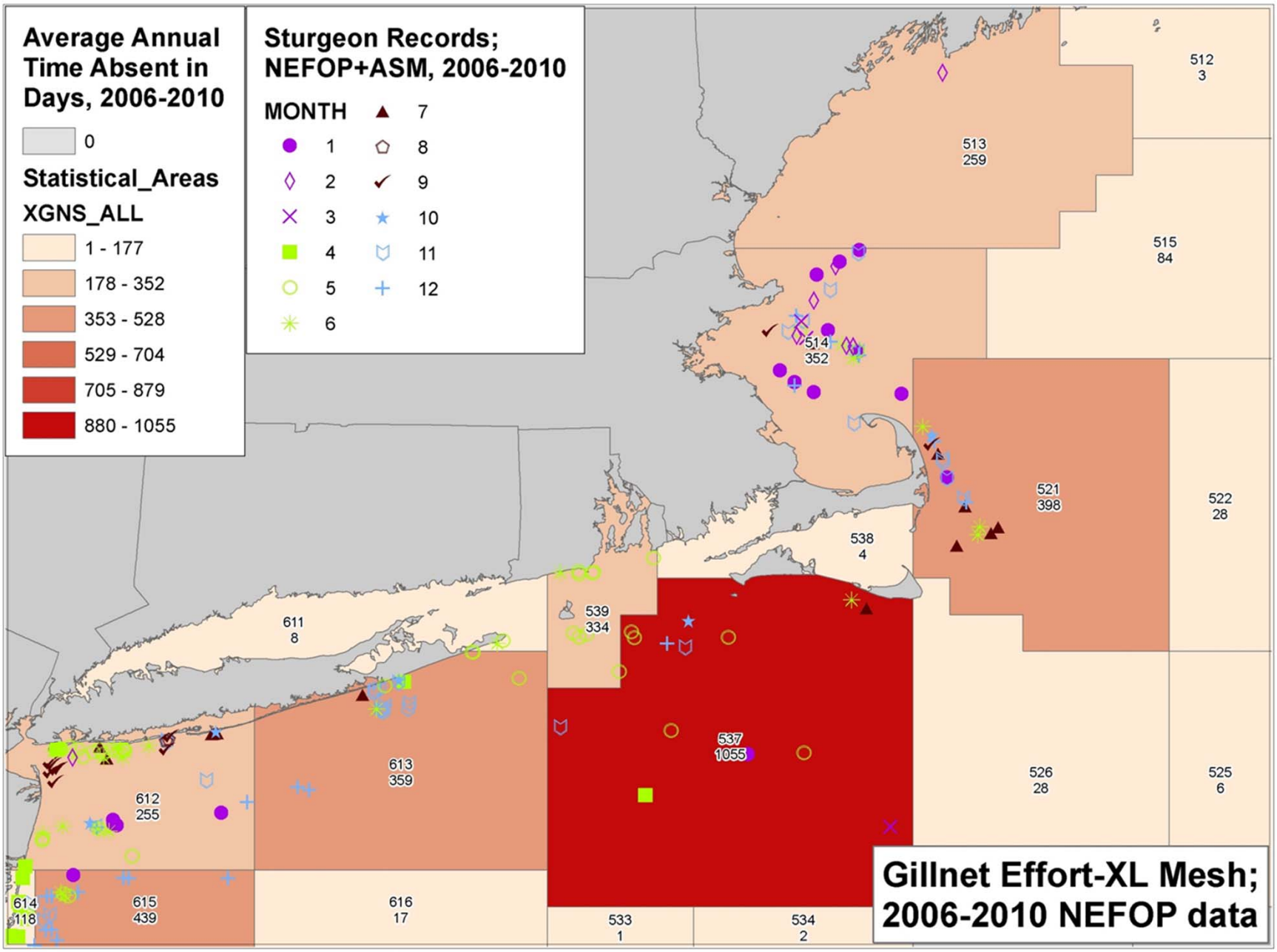

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
SGNS_ALL
1 - 32
33 - 63
64 - 94
95 - 124
125 - 155
156 - 186
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
514
3
538
539
6
611
8
613
52
537
612
75
615
14
616
533
534
614
87
625
146
621
84
622
623
624
Gillnet Effort-S Mesh; 2006-2010 NEFOP data

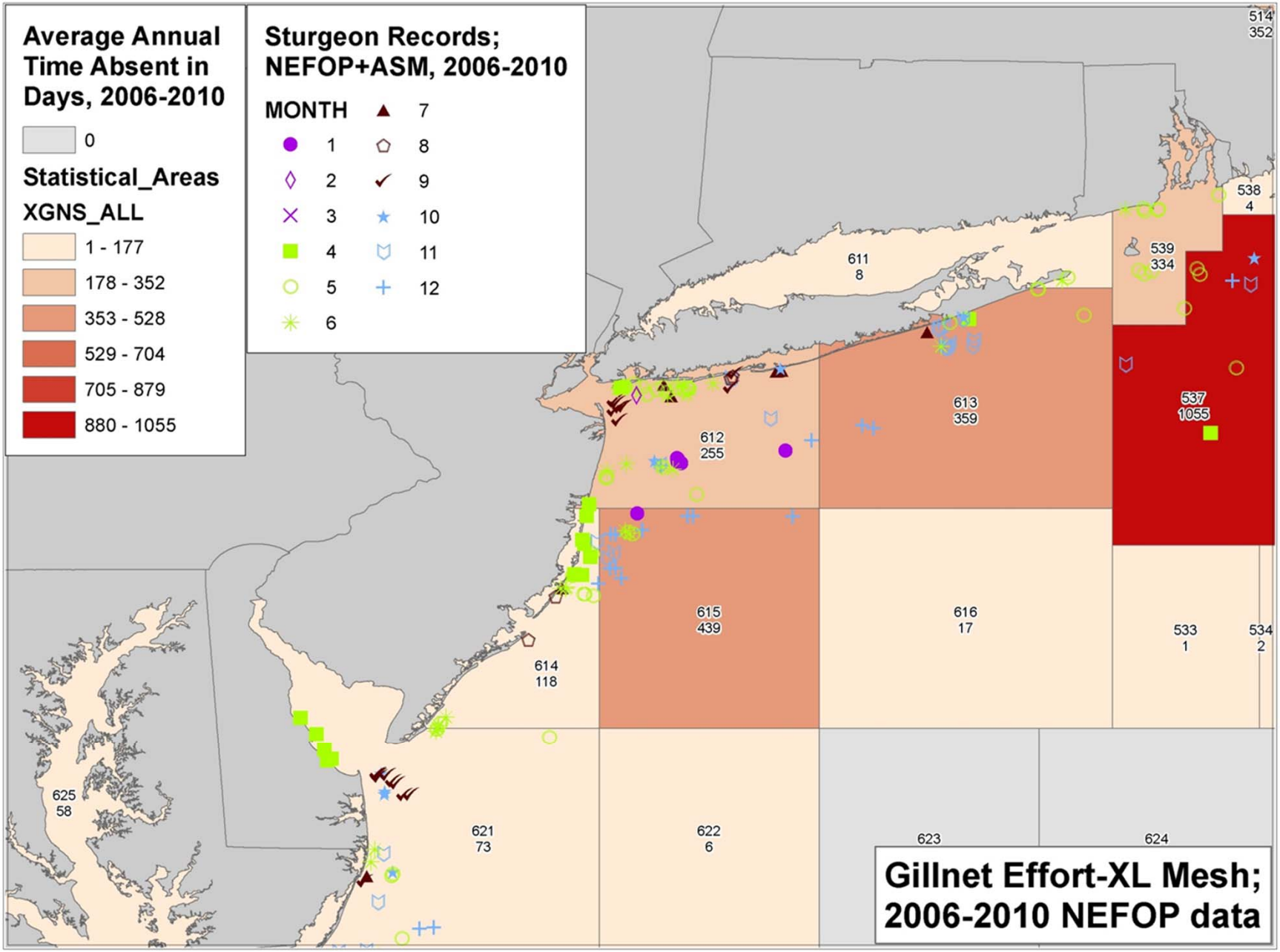

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
SGNS_ALL
1 - 32
33 - 63
64 - 94
95 - 124
125 - 155
156 - 186
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
621
84
622
625
146
626
17
627
631
73
632
2
633
631
73
635
186
636
12
637
700
8
701
702
Gillnet Effort-S Mesh; 2006-2010 NEFOP data

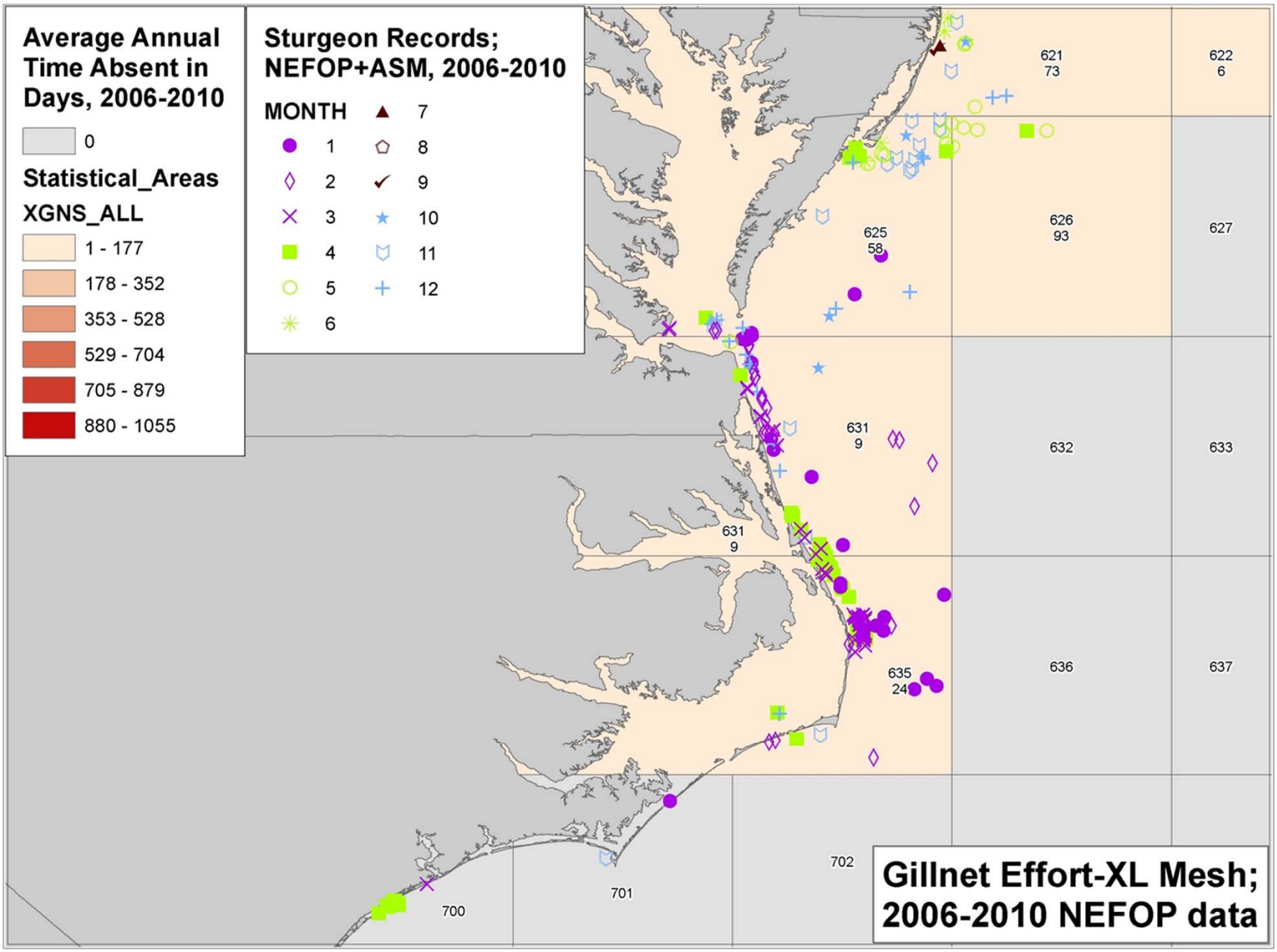

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
LGNS_All
1 - 220
221 - 439
440 - 658
659 - 877
878 - 1096
1097 - 1315
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
512 11
513 1049
514 1315
515 745
521 390
522 26
538 9
539 160
611 11
613 81
612 71
614 56
615 41
616
533
534 1
537 16
526
525 1
Gillnet Effort-L Mesh; 2006-2010 NEFOP data


Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
LGNS_All
1 - 220
221 - 439
440 - 658
659 - 877
878 - 1096
1097 - 1315
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
514
1315
538
9
539
160
611
11
613
81
537
16
612
71
615
41
616
533
534
1
614
56
625
79
621
48
622
623
624
Gillnet Effort-L Mesh; 2006-2010 NEFOP data


Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
LGNS_All
1 - 220
221 - 439
440 - 658
659 - 877
878 - 1096
1097 - 1315
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
621
48
622
625
79
626
6
627
631
32
632
2
633
631
32
635
91
636
7
637
700
2
701
702
Gillnet Effort-L Mesh; 2006-2010 NEFOP data


Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
XGNS_ALL
1 - 177
178 - 352
353 - 528
529 - 704
705 - 879
880 - 1055
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
512 3
513 259
515 84
514 352
521 398
522 28
538 4
539 334
611 8
613 359
537 1055
526 28
525 6
612 255
614 118
615 439
616 17
533 1
534 2
Gillnet Effort-XL Mesh; 2006-2010 NEFOP data

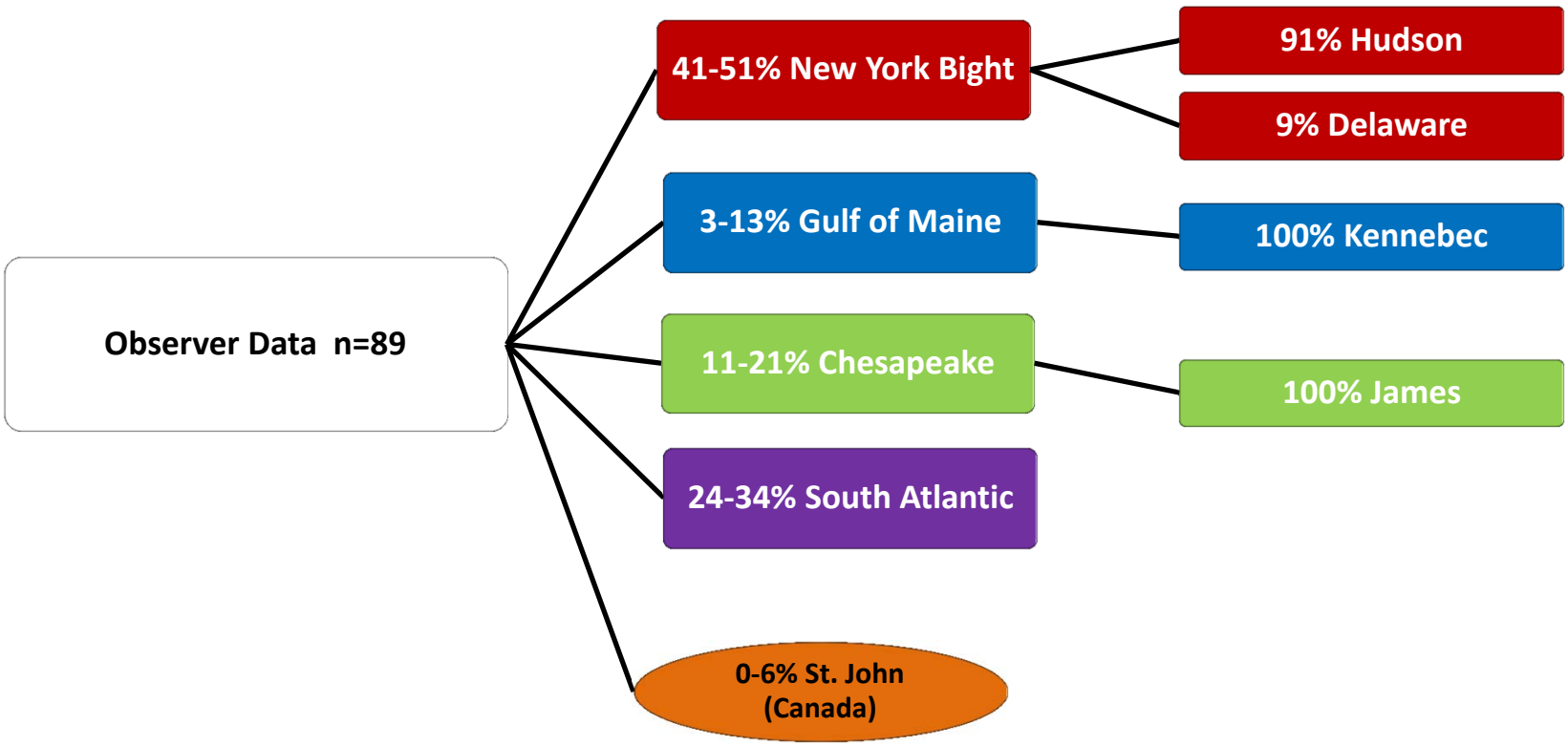

Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
XGNS_ALL
1 - 177
178 - 352
353 - 528
529 - 704
705 - 879
880 - 1055
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
514
352
538
4
539
334
611
8
613
359
537
1055
612
255
615
439
616
17
533
1
534
2
614
118
625
58
621
73
622
6
623
624
Gillnet Effort-XL Mesh; 2006-2010 NEFOP data


Average Annual Time Absent in Days, 2006-2010
0
Statistical_Areas
XGNS_ALL
1 - 177
178 - 352
353 - 528
529 - 704
705 - 879
880 - 1055
Sturgeon Records; NEFOP+ASM, 2006-2010
MONTH
1
2
3
4
5
6
7
8
9
10
11
12
621
73
622
6
626
93
627
625
58
631
9
632
633
631
9
635
24
636
637
702
701
700
Gillnet Effort-XL Mesh; 2006-2010 NEFOP data

NOAA FISHERIES SERVICE

Questions?

NEFOP Observer Data Genetic Mixed Stock Analysis



NEFSC Bycatch Report

- Used 2006-2010 data to provide an estimate of discards of Atlantic sturgeon
- Otter Trawl and Sink Gillnet Gear
- Only presents information for Northeast Fisheries
- Two methods were presented: design-based and model-based estimator
- Design Based estimator: expands the ratio of total sturgeon takes to total landings by the total landings within a cell
- Model-based estimator: incorporates the mixture of species associated with the observed trips. provided more rigorous results

NEFSC bycatch report…

- NEFSC considers use of the model based approach more appropriate
- Allocating takes to FMP is difficult based on the available information
- Model based approach is able to allocate takes to otter trawl vs. sink gillnet

Model Based Estimates

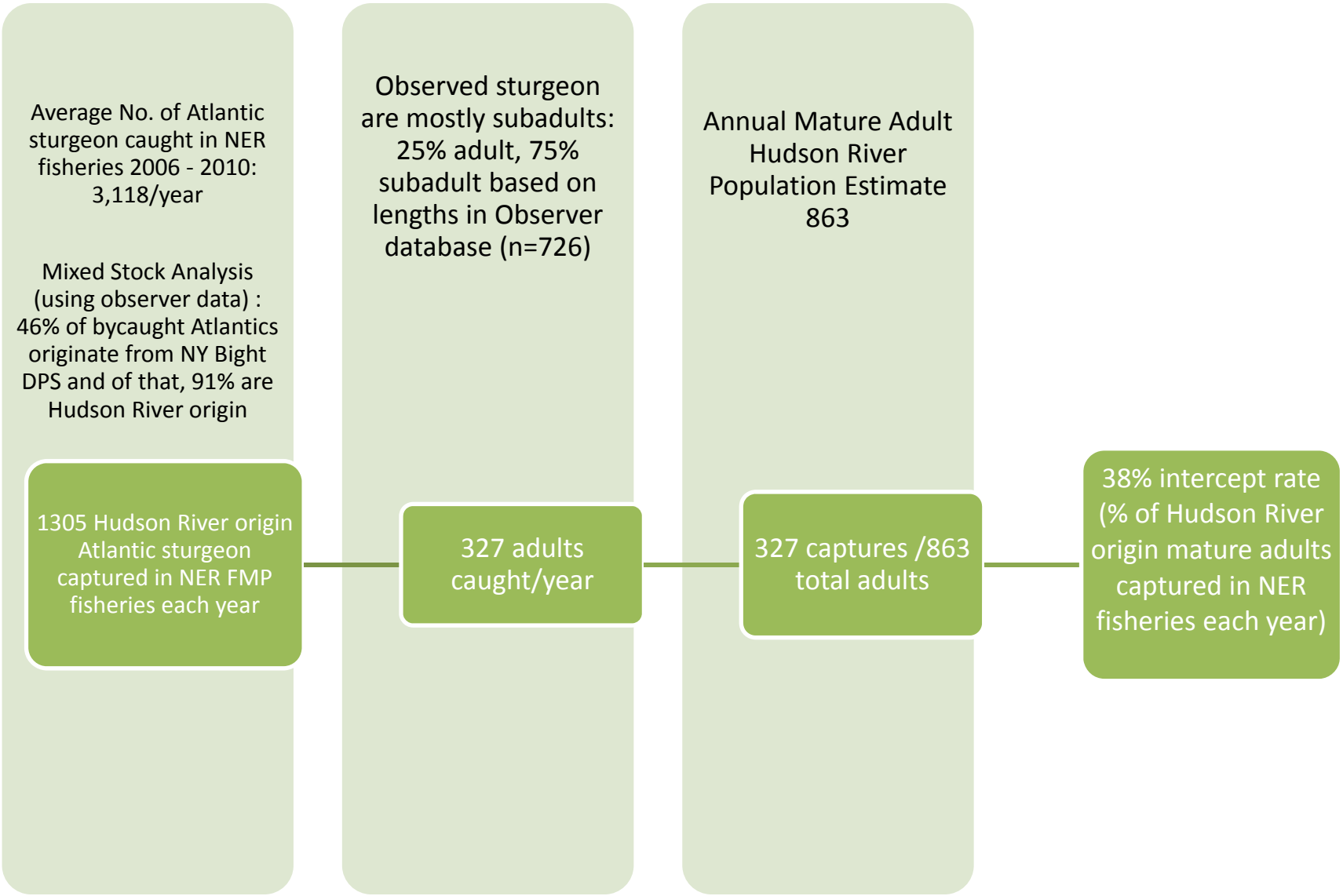
- On average (2006-2010) – 3,118 Atlantic sturgeon are captured in NER FMP fisheries each year (sink gillnet and otter trawl)
- Otter trawl and sink gillnet: no landings attributable to herring, river herring, salmon, tilefish, red crab or surf clams/ocean quahog when sturgeon were taken
- Mortality rate in otter trawls is approximately 5%* Mortality rate in sink gillnet is approximately 20%* (except gillnets where primary haul target is monkfish where mortality rate is 27%)*

*all mortality rates are based on observer categorizing take as dead or alive with no adjustment for post-release survival.

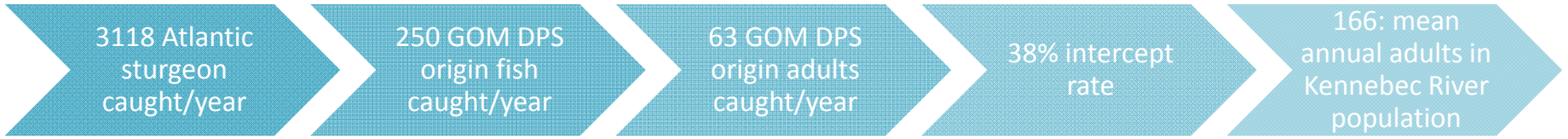
Bycatch Estimates

- Otter Trawl: 2006-2010 average 1,548 annual encounters (range 1,338-1,794)
- Approximately 77 mortalities/year (5% mortality rate)
- Sink Gillnet: 2006-2010 average 1,597 annual encounters (range 858-2,053)
- Approximately 320 mortalities/year (20% mortality rate)
- These estimates include trips where no “FMP” species were landed
- Approximately 13% of otter trawl estimate and approximately 22% of sink gillnet estimate is attributed to non-FMP

What % of the Hudson River adult population is captured in NER fisheries each year?



Using the "Hudson Intercept Rate" to Estimate the Number of Adults in other DPSs– GOM DPS



- 8% GOM DPS
- 25% adults

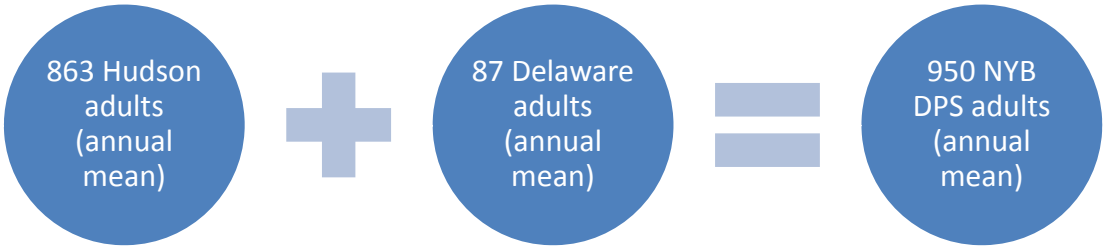
Use Hudson River intercept % to calculate Chesapeake Bay DPS adult population

- 16% CB DPS
- 25% adults

Use Hudson River intercept % to calculate South Atlantic DPS adult population

- 29% SA DPS
- 25% adults

Use Hudson River intercept % to calculate Delaware River population



Using the "intercept rate" and the mixed stock analysis for adults to calculate estimates of the Number of Atlantic sturgeon in NER Marine waters*

DPS	Mature Adult Population ***Estimate***	***Estimated*** Number of Subadults (at size vulnerable to fisheries)**	Combined ***Estimate*** of Adults and Subadults at size vulnerable to fisheries
GOM	166	498	664
NYB (863 in Hudson plus Delaware)	950	2850	3800
Chesapeake Bay	329	987	1316
South Atlantic	598	1794	2392

*unpublished NMFS estimates determined for the purposes of conducting Section 7 consultations

**this number is based solely on the observed ratio of 25% adults and 75% subadults; it takes the adult estimate and multiplies by 3.

Re-initiation of Existing Consultations

- All NEFMC and MAFMC FMPs are considered in existing ESA consultations
- Any consultation that considers an action that may affect any DPS of Atlantic sturgeon must be re-initiated to consider effects to these newly listed species
- These Opinions will update information and analysis for whales and sea turtles as appropriate

Existing Consultations

FMP	Existing Consultation Document	Expect Interactions with Atlantic sturgeon?
Red Crab	2002 Biological Opinion	No
Surf Clam/Ocean Quahog	2002 “Not Likely to Adversely Affect” determination	No
Tilefish	2001 Biological Opinion	No
Atlantic Herring	2010 “Not Likely to Adversely Affect” determination	No
Atlantic sea scallop	2008 Biological Opinion	Occasional interactions in trawl gear. None recorded in scallop dredge gear.
Tilefish	2001 Biological Opinion	No
Multispecies	2010 Biological Opinion	Yes
Monkfish	2010 Biological Opinion	Yes
Bluefish	2010 Biological Opinion	Yes
Spiny Dogfish	2010 Biological Opinion	Yes
Skate	2010 Biological Opinion	Yes
Squid/Mackerel/ Butterfish	2010 Biological Opinion	Yes
Summer Flounder/Scup/ Black Sea Bass	2010 Biological Opinion	Yes
Lobster	2010 Biological Opinion	No

Information Available for Consultations

- 2007 ASMFC Atlantic sturgeon bycatch report
  - Otter trawl and sink gillnet are gears of concern
- 2011 NEFSC Atlantic sturgeon bycatch report
  - Otter trawl and sink gillnet are gears of concern
- NEFOP and ASM Observer Database (726 recorded Atlantic sturgeon interactions since 2006)

Section 7 Consultation

- Section 7 of the ESA directs NMFS to ensure that all Federal actions are not likely to jeopardize the continued existence of any listed species
- Federal action = a discretionary action that is authorized, funded or carried out by a Federal agency
- We have typically considered each FMP to be an independent Federal action and have conducted consultations on an FMP by FMP basis
- We are currently exploring alternatives to this approach such as batching together FMPs with like gear types or otherwise similar operations. This effort is being driven by the difficulty of “assigning” or “allocating” take by FMP.

Possible Measures to consider to reduce interactions or mortalities

- Limiting Soak Time or Requiring Net Tending
- Reduced mesh size
- Increased twine size
- Effort controls
- Incentive Areas
  - Closed to gillnets but open to trawls
- Resuscitation of sturgeon
- Seasonal Area Closures
  - Known sturgeon aggregation areas
- Gear Modification
  - Monkfish BREP study

NOAA FISHERIES SERVICE

NERO Sturgeon Task Force

Goal – to provide a mechanism for full and open communication on sturgeon related issues within the region

Members – representatives from all NERO divisions, GCNE, OLE, HRC

Coordinated by PRD